

COUNTRY ANALYSIS BRIEFS

Syria

Last Updated: June 2010

Background

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Syria is the only significant crude oil producing country in the Eastern Mediterranean region, which includes Jordan, Lebanon, Israel, the West Bank, and Gaza. In 2009, Syria produced about 400,000 barrels per day (bbl/d) of crude and other petroleum liquids. Oil production has stabilized after falling for a number of years, and is poised to turn around as new fields come on line. In 2008, Syria produced 213 billion cubic feet (Bcf) of natural gas, and is expected to double its gas production by the end of 2010. While much of its oil is exported to Europe, Syria's natural gas is used in reinjection for enhanced oil recovery (EOR) and for domestic electricity generation.

Although Syria produces relatively modest quantities of oil and gas, its location is strategic in terms of regional security and prospective energy transit routes. Regional integration in the energy sector is expected to increase as a result of the 2008 opening of the Syrian link of the Arab Gas Pipeline and ongoing plans for the expansion of the pipeline network to include neighboring countries Turkey, Iraq, and Iran.



Oil

Syrian crude oil production has been in decline since the mid-1990s, but efforts are underway to turn it around in 2010.

According to *The Oil and Gas Journal*, Syria had 2.5 billion barrels of petroleum reserves as of January 1, 2010. Syria's known oil reserves are mainly in the eastern part of the country near its border with Iraq and along the Euphrates River; a number of smaller fields are located in the center of the country.

Organization

Syria's upstream oil production and development has traditionally been the mandate of the Syrian Petroleum Company (SPC), an arm of the Ministry of Petroleum and Mineral Resources. The SPC has undertaken efforts to reverse the trend toward declining oil production and exports by increasing oil exploration and production in partnership with foreign oil companies. The SPC directly controls about half of the country's oil production and takes a 50 percent stake in development work with foreign partners.

Foreign investment is vital for improving production levels. The main foreign producing consortium is the Al-Furat Petroleum Company, a joint venture established in 1985, which currently includes the SPC at 50 percent ownership, Shell Oil at 32 percent, and others, including China's CNPC. Asian national oil companies and smaller independents have been the most active in recent exploration tenders, including Gulfsands, led by Sinochem.

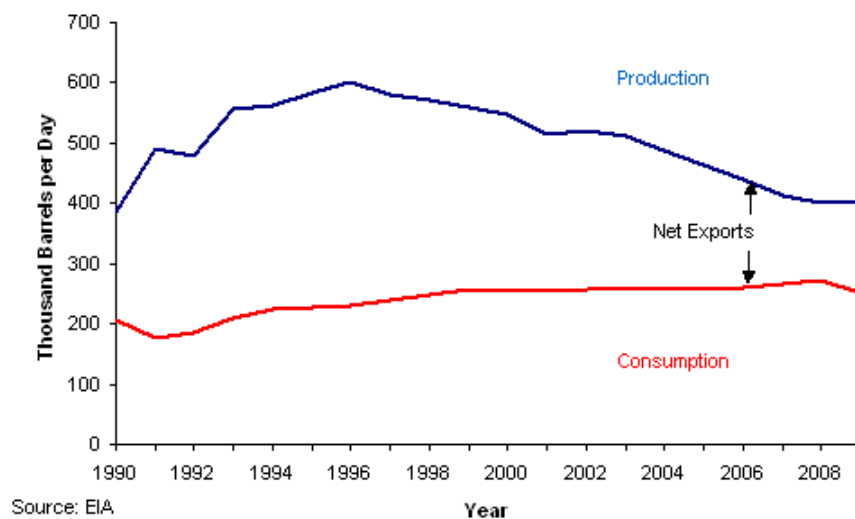
Production

Since peaking at 583,000 barrels per day (bbl/d) in 1996, Syrian crude oil production declined to an estimated 368,000 bbl/d in 2009, down from 390,000 bbl/d in 2008. Total oil liquids production, which includes crude and natural gas liquids (NGL), is estimated at about 400,000 bbl/d in 2009. Syrian oil minister Suffian Alao announced in April 2010 that the government expects oil production to increase in 2010 following 13 years of steady decline. Syria consumed 252,000 bbl/d of petroleum liquids in 2009.

The largest and most mature fields are Al-Furat's Omar and SPC's Jbessa fields, which reportedly had production capacity of 100,000 and 200,000 barrels per day, respectively, at the start of 2010. Other smaller mature fields, such as Oudeh, Gbeibe, and Tishrine, are under field rehabilitation contracts to CNPC and Sinopec, and their production capacity is on the rise. Contracts have been awarded to Shell and Total in 2008 and 2010 for exploration at greater depths in existing mature fields in the Euphrates and central areas. Gulfsands' Khurbet East field came onstream in 2008 with initial production of 10,000 bbl/d rising to 18,000 by the end of 2009. Khurbet East capacity is currently expected to increase due to recent drilling successes along with development work. Gulfsands is also involved in developing the nearby Yousefieh field, which is currently producing about 1,200 bbl/d and is expected to produce 6,000 bbl/d by 2012. All of these activities have reportedly added more than 50,000 bbl/d of production over the past 2 years, and a further 15,000-20,000 bbl/d is set to come on stream in 2010 from fields discovered by India's ONGC and Russia's Tatneft.

Attempts to explore the offshore Mediterranean were unsuccessful in 2007, as no offers were confirmed for the four blocks tendered, reportedly because terms were deemed unfavorable and the blocks too small. However, in April 2010, it was announced that eight new blocks, located onshore mainly in the north and east of the country, are open for bidding before a September 15 deadline. And the SPC plans to reissue tenders for the offshore blocks in the near future.

Syria's Total Petroleum* Balance, 1990-2009



Source: EIA

* crude oil plus products

Exports

In 2009, Syria's net petroleum exports were estimated to be 148,000 bbl/d. All oil exports are marketed by Sytrol, Syria's state oil marketing firm, which sells most of its volumes under 12-month contracts. Syrian crude oil exports go mostly to OECD European countries, in particular Germany, Italy, and France, totaling an estimated 143,000 bbl/d in 2009, according to International Energy Agency (IEA) data.

Pipelines

Syria has a developed domestic pipeline system for transporting crude and petroleum products managed by the Syrian Company for Oil Transportation (SCOT). Pipelines include the 250,000-bbl/d, 347-mile Tel Adas-Tartous crude line linking SPC and other fields to the port at Tartous with a connection to the refinery at Homs, and oil products pipelines linking the Homs refinery to Syria's major cities.

Syria has three Mediterranean oil export/import terminals, all managed by SCOT. Baniyas (7 berths) and Tartous (2 berths) are larger ports; Latakia handles smaller cargoes. The terminals are connected to refineries through the domestic pipeline network.

In 2009, it was reported that an initial agreement took place between Syria and Iraq to repair and reopen the Kirkuk-Banias oil pipeline, which extends 500 miles from oil fields in northern Iraq to the

Syrian port of Baniyas on the Mediterranean. This pipeline, which could be used to export production from Iraq's northern fields, has been closed since 2003. However, to date no contract has been awarded.

Refining

According to *The Oil and Gas Journal*, Syria's total refining capacity was approximately 240,000 bbl/d as of January 2010. Syria's two state-owned refineries are located at Baniyas and Homs, which have 133,000 bbl/d and 107,000 bbl/d, respectively, of refining capacity. Syria faces shortages of gas oil and diesel, which are imported. A proposed new 100,000 bbl/d capacity refinery project by CNPC at Abu Khashab is currently under contract following the completion of an economic feasibility study in early 2010.

Natural Gas

Syria will almost double its natural gas production in 2010, all of it slated for domestic use.

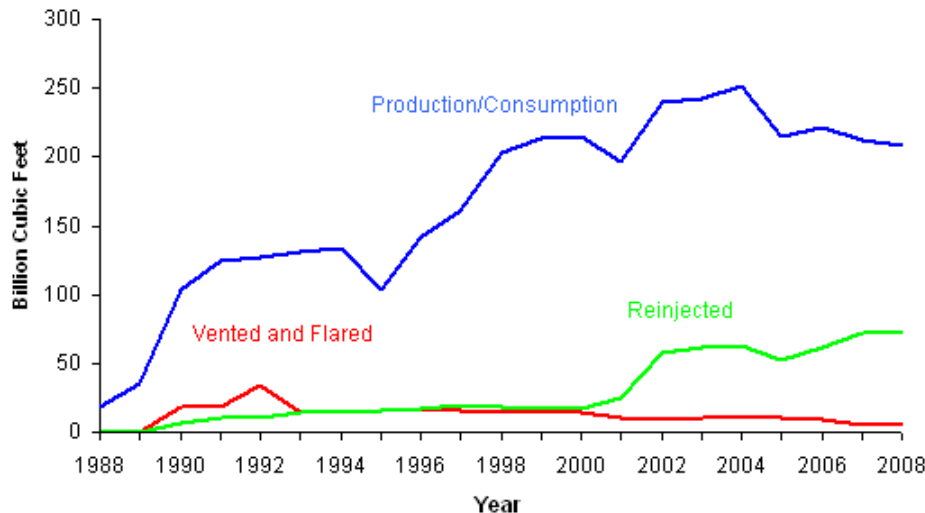
According to *The Oil and Gas Journal*, as of January 1, 2010, Syria's proven natural gas reserves were estimated at 8.5 trillion cubic feet (Tcf), about half of which is associated gas. Non-associated gas reserves are mainly located in the east and center of the country. Roughly 35 percent of Syrian natural gas production was reinjected into oilfields in 2008, about 2 percent was vented or flared, and the rest distributed to power generators and other domestic users.

Syria plans to substitute natural gas for oil in all of its domestic power generation and industrial use by 2014. Over half of Syria's power generating facilities are still fueled by refined oil products, much of which must be imported due to inadequate refining capacity.

Production

In 2008, Syria produced an estimated 208 billion cubic feet per year (Bcf/y) of natural gas, imported 5 Bcf, and consumed 213 Bcf. Syria's natural gas production was declining from 2004 to 2008, but it is now poised to increase rapidly as a series of new projects come on stream. By the end of 2010, Syria reportedly expects to double its 2008 production level. According to Syrian Minister of Petroleum and Mineral Resources Sufian Allao, reported by the Syrian Arab News Agency on April 14, 2010, Syrian natural gas production had reached 361 Bcf/y at that time and was expected to reach 412 Bcf/y by the end of 2010.

Syria's Natural Gas Balance, 1988-2008



Source: EIA

In November 2009, the South Central Area gas plant came online. Built by Russia's Sroytransgaz, the project produces about 88 Bcf per year of treated gas, thereby increasing Syria's total natural gas production by about 40 percent. Also in November 2009, an early production facility in Al Hayan gas field came onstream with the capacity to produce 7.8 Bcf per year. The main treatment plant at Al Hayan is being built by Petrofac, and is scheduled to start up in late 2010 with a capacity of about 50 Bcf per year. Suncor Energy (Petro-Canada) started up its Ebla gas plant in April 2010, producing about 29 Bcf per year from the Ebla gas fields. As natural gas production rises, gas demand for electric power generation grows and power plants switch from fuel oil to gas.

Natural Gas Imports and Pipelines

Syria is a natural gas importer since mid-2008, when it began importing an estimated 5 Bcf/y of natural gas from Egypt by way of the Arab Gas Pipeline (AGP). Syria's long-term aim is to become a transit state for Egyptian, Iraqi, Iranian, and even potentially Azerbaijani gas, which would gain it valuable

transit revenues as well as help increase the availability of natural gas imports to Syria. According to a 2009 agreement with Turkey, Syria will import up to 35 Bcf of gas from Turkey starting in 2011 with the opening of the Syria-Turkey section of the Arab Gas Pipeline.

Arab Gas Pipeline

The AGP currently links Egypt with Jordan, Syria, and Lebanon. Limited gas supplies to Lebanon from Egypt began at the end of 2009. Completion of the pipeline to Turkey is projected for 2011. A memorandum of understanding with Turkey was signed in 2009, under which Turkey will build a 56-mile pipeline on its side of the border to link into the line Syria is currently building from Aleppo to Kilis on the border. The Aleppo-Kilis line is to be completed by March 2011. According to the agreement, Syria will receive between 17.5 and 35 Bcf of Turkish gas annually for 5 years starting in 2011.

Syria-Iraq Gas Pipeline

Discussions are reportedly under way between Syria and Iraq to construct a new natural gas pipeline from the Akkas gas field in Iraq's western province of Al-Anbar, about 30 miles from the Syrian border. The main sticking points are terms for exports and Iraq's own domestic need for gas. Akkas has the potential to contribute to the supply of gas to Europe through tying into the Arab gas pipeline that will run to the Turkish border via Syria.

Persian Pipeline

Syria and Iran reportedly signed a cooperation agreement in April 2009 which includes plans for a natural gas pipeline between Iran and Syria via Iraq. The main sticking point is the security of the line through Iraq.

Profile

Energy Overview

Proven Oil Reserves (January 1, 2010E)	2.5 billion barrels
Total Oil Production (2009E)	400 thousand barrels per day
Crude Oil Production (2009E)	368 thousand barrels per day
Oil Consumption (2009E)	252 thousand barrels per day
Net Petroleum Exports (2009E)	192 thousand barrels per day
Crude Oil Distillation Capacity (2010E)	240 thousand barrels per day
Proven Natural Gas Reserves (January 1, 2010E)	8.5 trillion cubic feet
Natural Gas Production (2008E)	208 billion cubic feet
Natural Gas Consumption (2008E)	213 billion cubic feet
Natural Gas Imports (2008E)	5 billion cubic feet
Total Energy Consumption (2007E)	0.8 quadrillion Btu*, of which Oil (69%), Natural Gas (27%), Hydroelectricity (4%)
Total Per Capita Energy Consumption (2007E)	38.8 million Btu
Energy Intensity (2007E)	9,388 Btu per \$2000-PPP**

Oil and Gas Industry

Organization	Upstream and downstream oil and gas sectors controlled by the state-owned Syrian Petroleum Company (SPC) and the Syrian Gas Company (SGC), both part of the Ministry of Petroleum and Mineral Resources. Since 2001, Syria has re-opened upstream oil and gas exploration to international oil companies through production sharing agreements. Investments in downstream infrastructure are
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	also increasingly open to foreign investment.
Major Oil/Gas Ports	Baniyas, Tartous and Latakia
Foreign Company Involvement	Shell Oil, Total, Stroytransgaz, Gulfsands, Soyuzneftegaz, ONGC, CNPC, Petro-Canada, Petrofac, Sinochem, Sinopec, Tatneft.
Major Oil and Natural Gas Basins	Palmyra, Suweidiya, Deir Ez-Zour, Jbessa
Major Pipelines (capacity)	Arab Gas Pipeline (970 MMcf/d when completed to Turkey)
Major Refineries (capacity, bbl/d) (2010E)	Baniyas (132,725), Homs (107,140)

* The total energy consumption statistic includes petroleum, dry natural gas, coal, net hydro, nuclear, geothermal, solar, wind, wood and waste electric power.

**GDP figures from Global Insight estimates based on purchasing power parity (PPP) exchange rates.

Links

EIA Links

[EIA: Country Information on Syria](#)

U.S. Government

[CIA](#)

[U.S. State Department - Consular Information Sheet - Syria](#)

Other Links

[Oxford Business Group](#)

[AlBawabaSyroil](#)

[Al-Furat Petroleum Co.](#)

[Syrian Petroleum Co.](#)

[Gulfsands Petroleum](#)

[Euro-Arab Mashreq Gas Market Project](#)

[Nabucco Pipeline](#)

[Syrian Oil and Gas News](#)

Sources

Agence France Presse

Al- Furat Petroleum Co.

APS Review Oil and Gas Market Trends

BBC World wide Monitoring

Business Middle East

Daily News Egypt

Energy Intelligence Group

Global Insight

Government of Syria , Ministry of Petroleum and Natural Resources

Syrian Petroleum Company

Gulfsands Petroleum Co.

International Energy Agency

Middle East Economic Survey (MEE S)

Oxford Business Group

Syrian Arab News Agency (SANA)

Syrian News Digest

Syrian Petroleum Company (SPC)

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